

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Mixture~~ A mixture for preparing a reactive hot melt adhesive, containing comprising from 10 to 80 per cent by weight of a compound containing comprising at least one free isocyanate groups group and comprising from 20 to 90 per cent by weight of a polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group and obtainable obtained by polymerizing ethylenically unsaturated monomers, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has a polydispersity D of less than 1.9.

Claim 2 (Currently Amended): ~~Mixture~~ The mixture according to Claim 1, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group is obtainable obtained by copolymerizing one or more hydroxy-functionalized and/or amino-functionalized and/or mercapto-functionalized monomers and one or more monomers without hydroxyl and/or amino and/or mercapto functionality of alkyl esters of acrylic or methacrylic acid, vinyl esters, vinyl ethers, fumarates, maleates, styrenes and acylonitriles.

Claim 3 (Currently Amended): ~~Mixture~~ The mixture according to Claim 1, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has a glass transition temperature in the range from 15 to 85°C.

Claim 4 (Currently Amended): ~~Mixture~~ The mixture according to Claim 2, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 100 000 g/mol.

Claim 5 (Currently Amended): ~~Mixture~~ The mixture according to Claim 2, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has a hydroxyl number of greater than or equal to 4 and less than or equal to 80.

Claim 6 (Currently Amended): ~~Mixture~~ The mixture according to Claim 4, or 5, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has a hydroxyl number of less than or equal to 40 for a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 25 000 g/mol.

Claim 7 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of Claims 1 to 6~~ Claim 1, characterized in that wherein the polydispersity of the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group is adjusted by fractionation according to the molecular weight.

Claim 8 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of Claims 1 to 6~~ Claim 1, wherein the polymer containing comprising at least one

hydroxyl groups group and/or amino groups group and/or mercapto groups group has been is prepared by a polymerization mechanism which enables a polydispersity D of less than 1.8.

Claim 9 (Currently Amended): ~~Mixture~~ The mixture according to Claim 8, characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has been is obtained by anionic polymerization, RAFT or ATRP.

Claim 10 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound containing comprising at least one free isocyanate groups group is a low molecular mass diisocyanate and contains an organic radical with an aromatic.

Claim 11 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound containing comprising at least one free isocyanate groups group is obtainable obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 12 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound containing comprising at least one free isocyanate groups group is obtainable obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyamino- and/or polymercaptopo-containing compounds either alone together with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 13 (Currently Amended): ~~Mixture~~ The mixture according to one of Claims 10 to 12, characterized in that Claim 1, wherein the reactive hot melt adhesive has an isocyanate functionality of greater than 1 and less than or equal to 3.

Claim 14 (Currently Amended): ~~Mixture~~ The mixture according to one of the preceding claims, characterized in that it Claim 1, wherein the mixture further comprises additives such as plasticizers, compatible tackifiers, catalysts, fillers, antioxidants, pigments, stabilizers and thiol/silane-based adhesion promoters.

Claim 15 (Currently Amended): ~~Reactive~~ A reactive hot melt adhesive obtainable obtained by condensation reaction of the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group with the compound containing comprising at least one free isocyanate groups group of a the mixture according to Claim 1 to 14.

Claim 16 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, characterized in that it wherein the reactive hot melt adhesive exhibits a viscosity increase of less than 50% after 16 hours at 130°C.

Claim 17 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, characterized in that wherein after curing it the reactive hot melt adhesive contains less than 10 per cent by weight of extractables.

Claim 18 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that it~~ wherein the reactive hot melt adhesive has an open time of more than 400 seconds.

Claim 19 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that it~~ wherein the reactive hot melt adhesive has a shear strength after curing of more than 10 MPa.

Claim 20 (Currently Amended): ~~Use of the reactive hot melt adhesive of the invention~~ A method for adhesively bonding wood, metal, plastic and glass surfaces or combinations thereof comprising utilizing the reactive hot melt adhesive according to Claim 15 to bond the surfaces.